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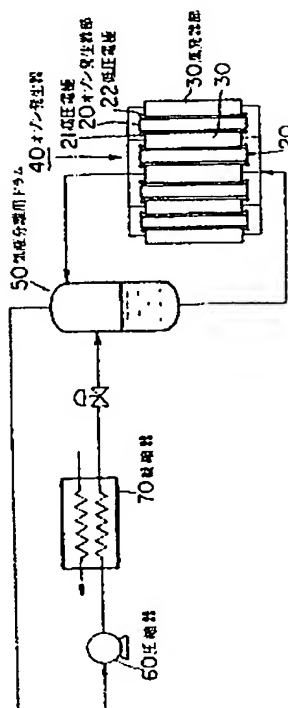
APPLICATION NUMBER : 62255950

APPLICANT : SUMITOMO PRECISION PROD CO  
LTD;

INVENTOR : KOBAYASHI JIRO;

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TITLE : COOLING DEVICE FOR OZONE  
GENERATOR



ABSTRACT : PURPOSE: To improve the cooling efficiency by providing a gas-liquid separation drum in the upstream side of evaporator part used for the cooling of electrode in an ozone generator, and allowing the refrigerant to generate natural circulation based on the thermosyphon principle.

CONSTITUTION: This cooling device for ozone generator is constituted of an ozone generating part 20, a pair of electrodes 21, 22, and an evaporator part 30 utilizing evaporating heat transfer of liquified refrigerant, etc. A dielectric body is provided on, each confronting surface of the pair of electrodes 21, 22 disposed so as to be confronted with a clearance between in the ozone generator part 20, A drum 50 for separating gas from liquid is disposed in the upstream of the ozone generator part 20, and the liquid surface in the drum 50 is kept to be higher than the evaporator part 30 so that the liquified refrigerant of insulating property is naturally circulated between the evaporator part 30 and the drum 50. A compressor 60 and a condenser 70 are connected to the drum 50 so that the refrigerant gas in the drum 50 is sent out to be liquified and returned again into the drum 50.

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